BINGSOL:

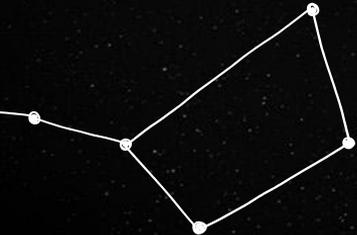## Bringing Innovative Notions in Geospatial Systems to Observe Land

Touchdown Earth: Space Missions Presentation
Pasay City National Science High School
Feliz Angelica Salting
Nyrene Joy Paulina Paranga

Presentation Outline

01

TITLE

BINGSOL:

Bringing Innovative Notions in Geospatial Systems to Observe Land

02

OBJECTIVES

- Application
- Development
- Education

03

SIGNIFICANCE

- Promote efficiency and productivity
- Encourage improvement
- Enhance sustainability

04

KEY FEATURES

- Type: Earth Observation (EO)
- Payload: Environmental and Natural Resource Monitoring (Remote-sensing applications)
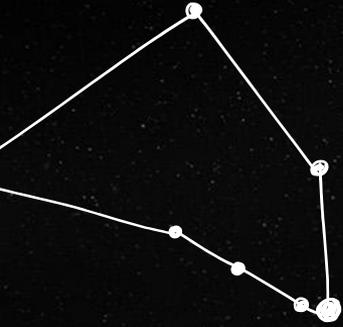
01

TITLE

Why is it named BINGSOL?

TRIVIA

In Philippine mythology, there is a god named Bingsol who is worshipped as one of the gods of agriculture, particularly known for being a guardian for ploughmen.
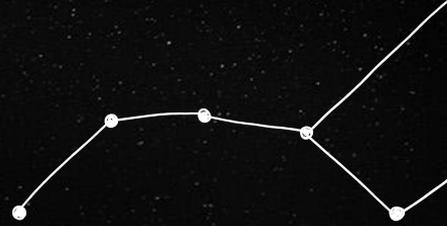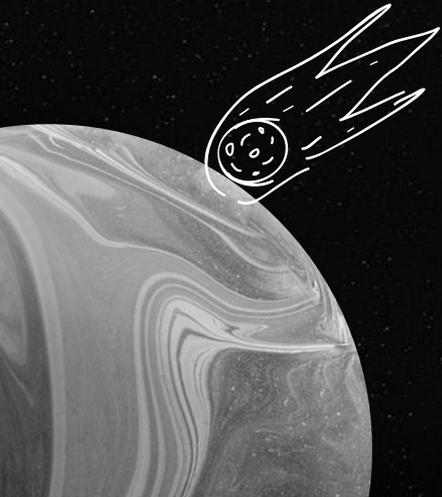
BINGSOL:
Bringing Innovative Notions in Geospatial Systems to Observe Land

02

OBJECTIVES

What is this space mission for?

OBJECTIVES

Application

Applying the analysis of satellite data in the enhancement of the agriculture and forestry industries in the Philippines

Development

Stimulating research and development for current crop monitoring systems and forest health monitoring systems in the Philippines

Education

Improving the Filipino public's education and awareness on the use of space technology for modern developments

03

SIGNIFICANCE

Why is this mission important?

RECENT DATA

State of the Philippine Agriculture Industry

The Philippine Statistics Authority (PSA) reported back on May 11, 2022 that at constant 2018 prices, the value of production in agriculture and fisheries decreased by -0.3% in the first quarter of 2022. A decrease in the value of production meant that the economic growth of agriculture in the Philippines trails behind that of the rest of the country.
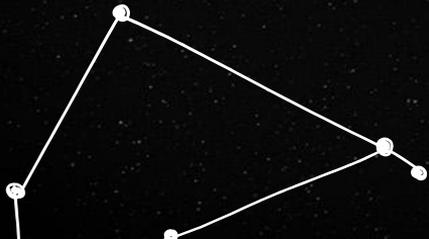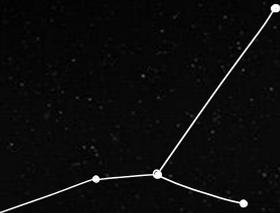
22.5 Mt
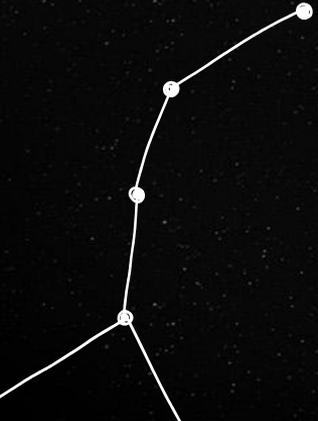
This is the number of CO2 emissions from natural forest loss in 2021. This is the result of losing 37.7kha of natural forest area in the Philippines (Global Forest Watch, 2021).

WHAT CAN WE DO?

Agriculture Industry

The growth of the current state of farming in the Philippines can be boosted through crop classification. Frequent monitoring of major crop areas in the country is highly beneficial in improving its value of production. On the other hand, ground-based mapping is not practical and costly; as a solution, satellite technology can aid in this problem.

Forestry Industry

In order to preserve the habitability of the area, support must be provided to local and national decision-makers for crucial planning effort. Synoptic, timely information can be provided only with satellite data. These data can be applied to monitor ecological attributes in inaccessible regions and spatially extensive regions as well as the capacity to detect the spatial ecosystem patterns and processes of Philippine forests.

SIGNIFICANCE

Efficiency

Utilization of satellite imagery and new technology promotes greater efficiency and productivity
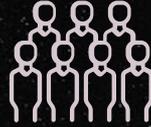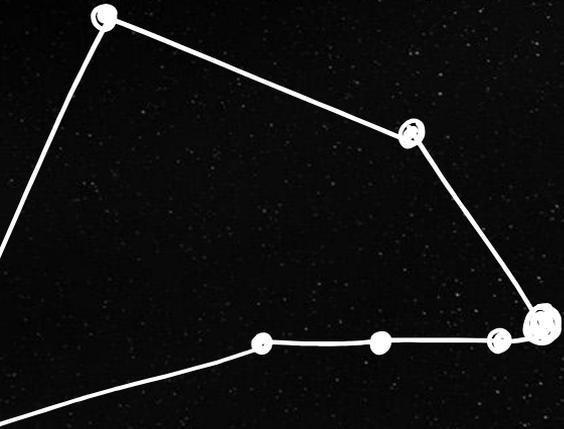
Encouragement

Encourages improvements in current farming and forestry practices among Filipinos
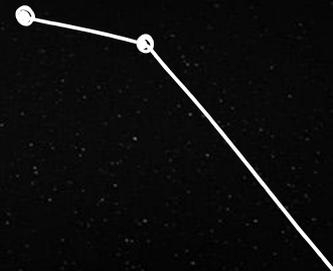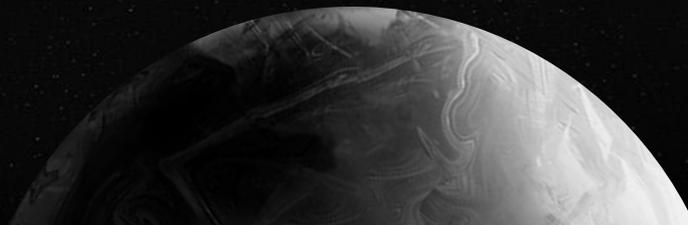
Enhancement

Enhancing sustainability and reducing risks for management and decision-making
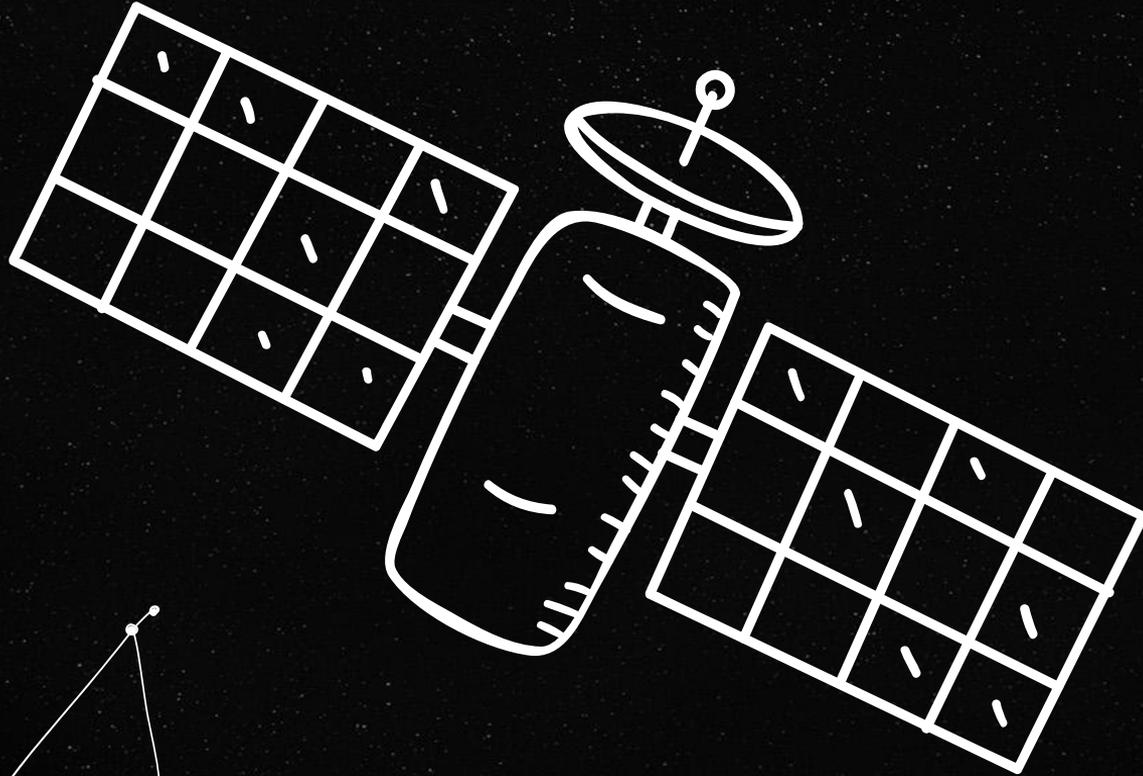
04

KEY FEATURES

What instruments or payloads will BINGSOL have?

KEY FEATURES OF THE MISSION

Satellite Type

Earth Observation (EO)

Payload

Environmental and Natural
Resource Monitoring

Application of Remote Sensors

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